

## REMARKS

Reconsideration of the application is requested in view of the above amendments and the following remarks. Claim 4 has been cancelled and the limitations of claim 4 have been added in independent form as new claim 22. Claim 5 has been amended to change its dependency to claim 22. Claims 7, 12, 15 and 16 have been amended to address § 112 issues. Claim 15 has been further amended and is supported by page 5, lines 19-30 and Figure 7 of the present application. Claim 16 has also been further amended to correct an error in the previous amendment and is supported at page 10, lines 9-11 of the present specification. Changes made to the claims by the current amendment are shown in the attached "Version With Markings to Show Changes Made."

Claims 19 and 20 have been restricted as being directed to an invention that is independent or distinct from the invention originally claimed. As the present application is a PCT national stage, new claims 19 and 20 should be evaluated under the unity of invention standard, not the independent or distinct invention standard. Applicants request consideration of claims 19 and 20 at this time.

Claims 7, 12, 15 and 16 have been amended to change the phrase "as a main component" to "as the main component," as suggested by the Examiner.

Claims 4 and 5 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. Claim 4 has been cancelled, rendering this rejection moot as to that claim. Claim 5 now depends from new claim 22 and is definite.

Claims 4, 6, 15 and 17 were rejected under 35 U.S.C. § 102(e) as being anticipated by Ichihara et al., U.S. 6,014,296. Applicants respectfully traverse this rejection. Claim 4 has been rewritten as new claim 22. Therefore, Applicants address this rejection insofar as it may be applied to new claim 22.

Ichihara discloses a non-magnetic hard material that is filled in a guard band between neighboring magnetic tracks. The guard bands disclosed by Ichihara are provided at regular intervals in the radial direction and thus fail to contribute to a formation of information signals. Furthermore, Ichihara discloses a magnetic member composing the magnetic track that is

continuous in the track length direction (the direction of signal time axis). Thus, the magnetic member disclosed by Ichihara is not formed into a pattern corresponding to an arrangement of the information signals (see Figures 4 and 14 in Ichihara), as required by claims 15 and 22. When manufactured, the magnetic disk disclosed by Ichihara is not provided with information signals that are represented magnetically or by surface shape patterns. Ichihara discloses information signals that are provided on the magnetic disk magnetically only when it is mounted on a magnetic recording apparatus and recorded with a magnetic head. On the contrary, the master information carrier required by claims 15 and 22 is provided with information signals that are represented by a pattern of a ferromagnetic film in the track length direction. Therefore, the magnetic disk disclosed by Ichihara is not capable of functioning as the master information carrier for recording information signals on a magnetic recording medium, as required by claims 15 and 22. Withdrawal of the rejection is respectfully requested.

Claim 7 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Ichihara et al. in view of Bar-Gadda, U.S. 6,309,802. Applicants respectfully traverse this rejection. As discussed above, Ichihara fails to disclose every limitation of claim 15. Bar-Gadda fails to remedy the deficiencies of Ichihara as it relates to claim 15. Therefore, claim 7 is allowable for at least the reason it is dependent upon an allowable base claim. Applicants do not concede the correctness of this rejection.

Claim 18 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Ichihara et al. in view of Aine, Re. 32,464. Applicants respectfully traverse this rejection. As discussed above, Ichihara fails to disclose every limitation of claim 15. Aine fails to remedy the deficiencies of Ichihara as it relates to claim 15. Therefore, claim 18 is allowable for at least the reason it is dependent upon an allowable base claim. Applicants do not concede the correctness of this rejection.

New claim 22 has been added to include the limitations of claim 4 rewritten in independent form. Consideration and allowance of claim 22 is respectfully requested.

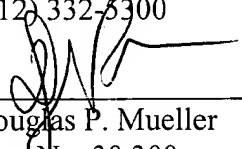
In view of the above, Applicants request reconsideration of the application in the form of a Notice of Allowance.

Respectfully submitted,



Date: December 11, 2002

MERCHANT & GOULD P.C.  
P.O. Box 2903  
Minneapolis, Minnesota 55402-0903  
(612) 332-5300

  
\_\_\_\_\_  
Douglas P. Mueller  
Reg. No. 30,300  
DPM:JNR:PSTdb:ae



VERSION WITH MARKINGS TO SHOW CHANGES MADE

RECEIVED  
DEC 16 2002  
TC 1700 MAIL ROOM

Please cancel claim 4 and amend claims 5, 7, 12, 15 and 16 as follows:

5. (Once Amended) A master information carrier according to claim [4] 22, wherein the polymer material is formed by diluting polyimide in a solvent to prepare a polyimide solution, spin-coating the polyimide solution, and curing it with heat.

7. (Twice Amended) A master information carrier according to claim 6, wherein the protective film comprises carbon as [a] the main component formed by sputtering.

12. (Twice Amended) A master information carrier according to claim 11, wherein said protective film comprises carbon as [a] the main component formed by sputtering.

15. (Once Amended) A master information carrier used for recording information signals on a magnetic recording medium, comprising a non-magnetic substrate; a pattern of a ferromagnetic film which is disposed on the surface of the non-magnetic substrate, the pattern being disposed in the track length direction so as to [corresponding] correspond to an arrangement of the information signals; and a non-magnetic solid material filled in portions between respective neighboring ferromagnetic film areas composing the pattern,

wherein the ferromagnetic film comprises a material selected from the group consisting of Co, Fe, and an alloy comprising Co or Fe as [a] the main component, and the non-magnetic solid material is selected from the group consisting of SiO<sub>2</sub>, Al<sub>2</sub>O<sub>3</sub>, Cu, Ag and an alloy comprising Cu or Ag as [a] the main component.

16. (Once Amended) A master information carrier used for recording information signals on a magnetic recording medium, comprising a non-magnetic substrate having an embossed surface that forms a pattern of recessed portions corresponding to an arrangement of the information signals; and a ferromagnetic film filled in the recessed portions of the pattern,

wherein the ferromagnetic film comprises a material selected from the group consisting of Co, Fe, and an alloy comprising Co or Fe as [a] the main component and the non-magnetic substrate comprises a material selected from the group consisting of SiO<sub>2</sub>, Al<sub>2</sub>O<sub>3</sub>, [Cu, Ag and an alloy comprising Cu or Ag as a main component] Si, and C.

Please add new claim 22 as follows:

22. (New) A master information carrier used for recording information signals on a magnetic recording medium, comprising a non-magnetic substrate; a pattern of ferromagnetic film which is disposed on the surface of the non-magnetic substrate, the pattern being disposed in the track length direction so as to correspond to an arrangement of the information signals; and a non-magnetic solid materials filled in portions between the respective neighboring ferromagnetic films areas composing the pattern,

wherein the ferromagnetic film comprises a material selected from the group consisting of Co, Fe, and an alloy comprising Co or Fe as the main component, and the non-magnetic solid material comprises a polymer material.